DEPARTMENT OF ENVIRONMENTAL QUALITY Metcalf Building, Helena, Montana 59620 (406) 444-3080

PROGRAMMATIC REVIEW/ ENVIRONMENTAL ASSESSMENT

Division/ Bureau:

Permitting & Compliance Division, Water Protection Bureau, Water Quality Discharge Permit Section, Storm Water Program

Proposed Action:

Issuance of a new Montana Pollutant Discharge Elimination System (MPDES) *General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System (MS4)*, Permit Number MTR040000. Permitting of small MS4 discharges is required to be implemented nationally through the federal Environmental Protection Agency (EPA), or delegated states and tribes, as Part of EPA's storm water phase II requirements. Complete EPA Phase I and II requirements have recently been incorporated into the Administrative Rules of Montana (ARM), Title 17, Chapter 30, Subchapters 11, 12, and 13. These rules became effective on February 14, 2003.

Description of Proposal:

Pursuant to section 75-5-605(2) MCA, of the Montana Water Quality Act (MWQA), the discharge of wastes to state waters without a current permit authorization from the Department is prohibited. Consequently, issuance of this General Permit will regulate the discharge of potential pollutants in storm water runoff from all designated small MS4s through an authorization to discharge under the General Permit.

This General Permit is applicable to the discharge of storm water associated with small MS4s within the boundaries of the State of Montana, including those on state, federal, or private lands. An "MS4" is defined in ARM 17.30.1102(13) and a "small MS4" is defined in ARM 17.30.1102(23). Briefly, an MS4 is typically a conveyance or system of conveyances owned by a state, city, town, or other public entity that discharges to state waters, and is designed or used for collecting or conveying storm water and is not part of a publicly owned sanitary sewer system.

The federal storm water phase II rules expanded the scope of storm water permitting to include the small MS4s, which include all MS4s that are not already designated and regulated as a medium (at least 100,000 people) or large (at least 250,000 people) MS4 under EPA's phase I requirements. Montana has no medium or large MS4s. However, the phase II rules do not require that all MS4s serving populations of less than 100,000 be regulated.

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For "urbanized areas" as defined by the U.S. Census Bureau (data/maps indicating areas that have a population over 50,000 and an average population density of 1,000 people per square mile), small MS4s within this area require MPDES permit coverage. Within Montana, these urbanized areas include the City of Billings, portions of Yellowstone County outside the City of Billings, the City of Missoula, portions of Missoula County outside the City of Missoula, the City of Great Falls, and portions of Cascade County located outside the City of Great Falls (including Malmstrom AFB). Phase II rules require these jurisdictions to obtain MPDES permit coverage for small MS4s within the mapped "urbanized area".

For areas with a population below 50,000, Phase II requires States to establish designation criteria for use in designating which small MS4s must develop storm water management programs, and the federal rules provide suggested criteria for that purpose. Also, the federal requirements state designation criteria must be developed to "evaluate whether a storm water discharge results in or has the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts". Based on federal requirements, these designation criteria must be, at least initially, applied to cities with a population of at least 10,000. Using this federal designation criteria rationale, the Department has determined that municipalities in Montana with a population of 10,000 and greater have the potential to affect water quality as stated above. Consequently, and in addition to the three urbanized areas stated above, municipalities designated for small MS4 permitting are the City of Helena, the City of Butte, the City of Bozeman, and the City of Kalispell. The "small municipal separate storm sewer system" definition in ARM 17.30.1102(23) lists small MS4s in the aforementioned cities and surrounding areas. This rule definition also includes other potential designated areas from ARM 17.30.1107, and includes small MS4s at military bases, large educational, hospital or prison complexes, and highways and other thoroughfares. Consequently, Malmstrom AFB, University of Montana - Missoula, Montana State University - Bozeman, and Montana Department of Transportation highways require small MS4 General Permit coverage.

ARM 17.30.1111, and consequently the General Permit, contains a provision to credit and allow the continued use of qualifying local programs if they show that they already have a storm water control program that meets the minimum requirements set out in the phase II rules.

ARM 17.30.1107 also contains designation criteria and procedures for designation of small MS4s in addition to those stated above. These designation criteria would typically be applied on an as needed basis to small MS4s not regulated, essentially those in municipalities with a population under 10,000 people. Criteria to be used in this designation are based on federal requirements, and are very similar to federal designation criteria. Criteria include discharge(s) to listed impaired waterbodies on the most recent 303(d) list, high growth or growth potential, high population density, contiguity to an urbanized area, and significant contribution of pollutants to surface waters. A small MS4 may also be designated if it is interconnected with a regulated small MS4.

ARM 17.30.1107 also contains procedures for designation of small MS4s in response to petitions, and for changing a determination if circumstances change or if new information becomes available.

Based on federal requirements, ARM 17.30.1107 also contains two sets of procedures for waiving small MS4 permit coverage within "urbanized areas" for jurisdictions with a population under 1,000, and 10,000, if certain conditions are met.

Characteristic effluent discharge from small MS4s has been determined to pose a potential threat to receiving state waters. Studies performed over the past twenty years have indicated urban storm water runoff from residential, commercial, and light industrial areas carried higher than normal annual loadings of total suspended solids (TSS), chemical oxygen demand (COD), total lead, total copper, other metals, oil & grease, nutrients, other organic chemicals/compounds, and microorganisms (including fecal coliform). Pollutant concentrations may vary considerably with respect to events and location.

Table 1 gives pollutant concentrations of storm water runoff from urban commercial and residential areas (source *EPA Environmental Impacts of Stormwater Discharges: A National Profile*, published June 1992). This data is based on results from the Nationwide Urban Runoff Program (NURP), and does not represent pollutant contributions from illicit connections, spills, industrial activities, or dumping (such as litter).

Table 1: Storm Water Characteristic Effluent from Small MS4s

	Median	90 th	Montana Water Quality
Parameter, units	Concentration	Percentile	Standards (applicable to receiving surface waters not including ephemeral streams)
Total Suspended Solids, mg/L	125	390	No Increase, see ARM 17.30.623(1)(f)
Biological Oxygen Demand, mg/L	12	20	Not Available ²
Chemical Oxygen Demand, mg/L	80	175	Not Available ²
Total Phosphorus, mg/L	0.41	0.93	Nutrient, see ARM 17.30.637(1)
Total Nitrogen, mg/L	2.00	4.45	Nutrient, see ARM 17.30.637(1)
Total Copper, mg/L	0.040	0.120	0.0052 @ 50 mg/L hardness ¹
Total Lead, mg/L	0.165	0.465	0.0032 @ 100 mg/L hardness ¹
Total Zinc, mg/L	0.210	0.540	0.067 @ 50 mg/L hardness ¹

¹ Source DEQ Circular WQB-7, January 2002

Additionally, substantial technical and storm water quality data justifying EPA's Storm Water Phase II permitting requirements for small MS4s may be found in another EPA document entitled *Storm Water Discharges Potentially Addressed by Phase II of the*

² Standard based on dissolved oxygen

National Pollutant Discharge Elimination System Storm Water Program – Report to Congress, published March 1995.

Data pertaining to the "oil and grease" parameter in storm water runoff has also been presented in the aforementioned EPA literature. It is broken down into 31 different industrial sectors, many of which could typically be found within an urban area, but no overall NURP data was presented for use in Table 1. The average median oil & grease concentration for these 31 industrial sectors is 1.07 mg/L. This does not include other potentially significant sources of oil & grease within these urban areas however, such as that from vehicles.

Conditions pertaining to the Small MS4 General Permit are based on regulations found in ARM Title 17, Chapter 30, Subchapters 11 and 13. Most conditions unique to this particular General Permit come from ARM 17.30.1111. The most significant special condition is the requirement to develop, implement, and enforce a Storm Water Management Program (SWMP), as referred to above. Based on ARM 17.30.1111(5)(a), the Department will require this SWMP to be fully implemented by the expiration date of this General Permit for regulated small MS4s which have been designated through ARM 17.30.1102(23) and initially submitted an application in March 2003. This SWMP must address the following six minimum control measures as provided for in ARM 17.30.1111(6):

- 1) Public education and outreach on storm water impacts;
- 2) Public involvement/participation;
- 3) Illicit discharge detection and elimination;
- 4) Construction site storm water runoff control;
- 5) Post-construction storm water management in new development and redevelopment; and,
- 6) Pollution prevention and good housekeeping for municipal operations.

In order to initiate the development and implementation of a SWMP, the application must include the following as provided for in ARM 17.30.1111(2):

- 1) A description of the BMPs that the small MS4 will implement for each of the six storm water minimum control measures;
- 2) Identification of the measurable goals for each of the BMPs including, as appropriate, the months and years in which the small MS4 will undertake required actions, including interim milestones and the frequency of the action; and
- 3) The person or persons responsible for implementing or coordinating the SWMP.

If applicants cannot provide this information required in ARM 17.30.1111(2) with the initial application, the General Permit contains a Compliance Schedule which will allow permittees to submit more detailed information in the 2005 calendar year annual report. ARM 17.30.1111(14) requires annual reports, which update and elaborate on the progress of developing and implementing the SWMP, to be submitted to the Department by

January 28th following each calendar year of active General Permit coverage. Other requirements contained in ARM 17.30.1111 are built into the General Permit and include those pertaining to sharing responsibilities for the SWMP, reporting & records retention, potential co-permitting of small MS4s under a single permit authorization, and elaboration of requirements for each of the six minimum control measures.

Standard Conditions in General Permit MTR040000 include all pertinent requirements listed in ARM 17.30.1342. A listing of these Standard Conditions, which pertain to all MPDES permits, is included in the General Permit.

This General Permit incorporates monitoring and reporting requirements. The "power to require monitoring" is granted to the DEQ through 75-5-602 MCA, and is further clarified through ARM 17.30.1351(2). Analytical monitoring (sampling, testing, evaluating, reporting, etc.) for small MS4s covered by this General Permit will be required only for small MS4s owned or operated by the city governments associated with Billings, Bozeman, Butte, Great Falls, Helena, Kalispell, and Missoula. Monitoring will performed within the city limits for each of these.

Monitoring frequency will be biannually. For each half-year period, each of the identified small MS4s above will be required to sample one of the relatively largest (based on flow or geographic area) representative discharges from a relatively commercial/industrial area, and one from a relatively residential area, within their permitted geographic area.

Based on the historical effluent characteristics for existing permitted storm water discharges, the NURP storm water quality study data presented in various EPA publications (see Table 1 above), and experience within the bureau regarding performance of BMPs in protecting state waters, sampling and testing for the parameters listed in Table 2 will be required.

Table 2. Small MS4 Effluent Monitoring Requirements

Parameter ⁽¹⁾⁽²⁾	Frequency	Type ⁽³⁾
Total Suspended Solids (TSS), mg/l	Semiannual	Grab or Composite
Chemical Oxygen Demand (COD), mg/l	Semiannual	Grab or Composite
Total Phosphorus, mg/L	Semiannual	Grab or Composite
Total Nitrogen, mg/l	Semiannual	Grab or Composite
pH, standard units	Semiannual	Instantaneous
Copper, mg/l	Semiannual	Grab or Composite
Lead, mg/l	Semiannual	Grab or Composite
Zinc, mg/l	Semiannual	Grab or Composite
Estimated Flow, gpm	Semiannual	Instantaneous ⁽⁴⁾
Oil and Grease ⁽⁵⁾ , mg/l	Semiannual	Grab

⁽¹⁾ Detection limits are pursuant to levels defined in WQB-7.

⁽²⁾ Total recoverable methods to be used on all metals.

⁽³⁾ See Definitions in Part V of the permit.

- Estimated flow rates are appropriate in cases where measurement gauges are not installed.
- (5) Hexanes extraction (EPA Method 1664A).

Analytical monitoring data will be reported to the Department using the Department's Discharge Monitoring Report Form (DMR), and entered into the Department's Permit Compliance System (PCS) database. Biannual sampling will be reported by January 28th and July 28th of each calendar year. Also, the Department will require permittees to evaluate their storm water quality as a part of each reporting cycle, and to compare the data with the median values of the NURP data in Table 1. This comparison of data with NURP median values is essentially the same approach as the benchmark monitoring used for industrial and mining storm water discharges in other general permits.

During this initial General Permit cycle of five years, the purpose of this monitoring effort is to obtain some data in order to characterize Montana's urban area storm water quality relative to the NURP study data, establish a baseline, and to monitor the effectiveness of BMPs.

All small MS4s covered under this General Permit will be required to submit an annual report to the Department. This annual report is required in ARM 17.30.1111(14). The annual report will address compliance with permit conditions, progress and/or changes with respect to measurable goals and/or implementation of BMPs, future plans, and other related reporting issues. Updated certification and signature pages and signatory designation letters must be submitted to the Department as personnel changes occur for the permitted small MS4.

Benefits and Purpose of Proposal:

The purpose of the issuance of this General Permit, other than satisfying federal and state rules, is to regulate the discharges from small MS4s. Even though this formal permitting category is labeled "small MS4" nationally, in Montana this permitting will translate into improvements in discharging storm water quality in our largest urban areas.

The primary benefit of permitting small MS4s will be to require the regulated small MS4s to develop, implement, and enforce the SWMP which addresses the six minimum control measures. This in an initiative which is unprecedented in storm water permitting in that public education and involvement is built into the SWMP. This will provide an ongoing dialog of public interaction that far exceeds the one-time interaction associated with a typical General Permit issuance. Improvements in storm water quality, and consequently receiving water quality, should typically occur through this SWMP and the numerous BMPs which are developed and implemented through the SWMP.

<u>Description and analysis of reasonable alternatives whenever alternatives are</u> reasonably available and prudent to consider:

1. Issuance of the General Permit

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The issuance of this General Permit is required based on federal and state regulations governing discharges of pollutants by storm water runoff into state waters. This General Permit requires small MS4s to characterize their storm water discharge in order to prevent violations to water quality standards and to protect the quality of the receiving state waters.

The General Permit would require small MS4 permittees to develop, implement, and enforce a SWMP. The SWMP must address six minimum control measures which describe the small MS4's characteristics and potential sources of storm water pollution. One control measure will benefit small MS4 storm water quality through the identification and elimination of illicit discharges into the small MS4. Pollution prevention initiatives will be developed and implemented through BMPs. This includes measures to limit contact with or minimize the discharge of pollutants that come in contact with storm water runoff. BMPs include a wide variety of potential measures and actions which may be undertaken during the initial five-year General Permit cycle.

Because flow rates are so variable for storm water discharges, and storm water discharges may potentially contain pollutants, numeric effluent limits have not been developed at this time. Based on ARM 17.30.1111(5), it is the Department's position that the best method of control to protect state waters is through BMPs brought about by the development, implementation, and enforcement of the SWMP. These BMPs would be the most cost-effective means to eliminate or minimize pollutant discharge, by preventing contact or removing pollutants before discharging runoff from storm events.

Also, authorizations to discharge under this General Permit do not allow for non-storm water discharges, other than certain categories which are determined by the permittee to not be significant contributors of pollutants to the small MS4. This permit does not cover discharges of process wastewaters or commingled storm water.

2. No Action Alternative

The General Permit requires small MS4s permittees to develop, implement, and enforce their SWMP such that resulting BMPs help eliminate or minimize pollution to state waters that may be caused by storm water discharges. If the General Permit were not issued, these discharges would still occur, but there would be reduced controls and measures to help eliminate or minimize this pollution.

Without coverage under this General Permit, when a potential problem pollutant discharge occurred, the Department's response would be limited to enforcement actions after the fact. Such enforcement actions would have a deterrent effect on future discharges, but would not be as effective as permit coverage to minimize pollution in the first place. This General Permit is unique in that it is creating an actual SWMP for each permittee in order to broadly implement BMPs throughout

Montana's more urban areas. If the General Permit were not issued, there would be an increased potential for pollution from storm water runoff in these more urban areas to occur, as BMPs and control measures would be less adequately addressed.

3. Issuance of an Individual MPDES Permit

Another alternative would be to require operators which would otherwise be covered under this General Permit to apply for and obtain an MPDES Individual Permit. ARM 17.30.1111(5) states a SWMP will be developed, implemented, and enforced by the permittee, and that narrative effluent limitations requiring this SWMP and implementation of BMPs are the most appropriate form of effluent limitation. In this case, individual permits would be similar to the proposed General Permit in that they would require the development, implementation, and enforcement of a SWMP and the use of BMPs.

An individual permit must be developed and be specific for each site that requires coverage, whereas the General Permit allows for like activities to be authorized for a geographic area under the General Permit. Issuing an individual permit provides little additional benefit in terms of resource protection. Also, in permitting storm water discharges associated with small MS4s, the use of General Permits is the typical approach being used by the EPA and other states.

<u>Listing and appropriate evaluation of mitigation, stipulations, and other controls enforceable by this or another government agency:</u>

Authorizations issued under this permit may be affected by regulations through other federal, state, local law, rule, standard, ordinance or order. The authority of this General Permit is based on MPDES regulations and institutes controls for the appropriate management of storm water discharges from applicable sources. Requirements associated with other enforceable entities may overlap or supplement these requirements.

Affected Environment and Impacts of the Proposed Project:

The following symbols are used in the table below.

Key to Ranking		
NA	Not applicable	
N	No effects	
В	Potentially beneficial effects	
C	Potentially minor adverse effects	
A	Potentially major adverse effects	
M	Corrective action required	
P	Additional permits will be required	

Note: The table below discusses potential effects from issuance of the *General Permit* for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System (MS4). The table does not discuss the effects of any actual facilities or activities discharging into the small MS4. This table reflects the effects due to the actual issuance of this General Permit, as the small MS4 discharges requiring permitting at this time already exist regardless of whether this General Permit is issued.

Rank	Consideration	Remarks		
	Physical and Biological Environment			
B, C	1. Soil Suitability, Topographic, and/or Geologic Constraints (soil moisture, unstable soils or geologic condition, steep slopes, erosion potential, subsidence potential, seismic activity)	Issuance of the General Permit would have beneficial effects in this category. Implementation of a SWMP and installation of BMPs will reduce the potential for soil erosion caused by storm water runoff. Implementation of BMPs could have minor adverse effects by altering moisture content downslope by changing flow patterns and subsurface infiltration of precipitation and snowmelt. Actual construction of some BMPs could also have a minor temporary adverse effect through disturbed soils temporarily being at more risk of erosion.		
N	2. Hazardous Facilities (power lines, hazardous waste sites, distances from explosive and flammable hazards including chemical/petroleum storage tanks, underground fuel storage tanks and related facilities such as natural gas storage facilities and propane tanks)	Authorization to discharge storm water under this General Permit should have no effects on hazardous facilities except through the implementation of the SWMP, the control of hazardous materials may have stricter oversight. In addition, this General Permit allows for discharge of storm water only; no process wastewater or harmful non-storm water discharges are allowed.		
В,С	3. Air Quality (effects to or from project, dust, odors or emissions)	Through the implementation of the SWMP and installation of BMPs, there are potential beneficial effects to air quality through proper handling and management practices. Any adverse effects would be minor and would arise from the construction of potential future BMPs.		
B, C	4. Ground Water Resources and Aquifers (quality/nondegradation, quality/reliability, distribution, users/rights, number of aquifers, mixing zones)	Issuance of this General Permit would have beneficial effects on ground water quality. BMPs brought about through the SWMP would help minimize or eliminate the release of pollutants into state waters, including ground water. It would reduce the infiltration of pollutants into ground water. In some case the infiltration of relatively contaminated storm water in detention structures may allow for a minor adverse effect to ground water.		
B, C	5. Surface Water Resources (quality/ nondegradation, quantity/reliability, distribution, users/rights, storm water controls, source of community supply, community treatment, mixing zones)	Issuance of this General Permit may have beneficial effects on surface water quality. Implementation of the SWMP and installation of the BMPs will reduce the potential for pollutants to reach the small MS4, and consequently, discharge from the small MS4. Annual reports, self-monitoring requirements, and the progressive development and implementation of the SWMP will help provide for the continual evaluation of BMP effectiveness in reducing the discharge of pollutants to surface water.		
B, C	6. Vegetation and Wildlife Species and Habitats, Including Fisheries and Aquatic Resources (threatened, endangered, sensitive species, prime habitat, population stability, potential for human wildlife conflicts, effectiveness of post-disturbance plans)	Issuance of this General Permit would have beneficial effects on fisheries, aquatic vegetation, and other aquatic resources. Implementation of the SWMP and BMPs would reduce the potential for pollutants reaching surface waters. Installation of BMPs may create temporary or permanent new habitats (such as ponds and wetlands) and may provide new or improved vegetation. The actual construction of BMPs could have temporary minor adverse effects in a relatively localized area around the BMPs.		

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B, C	7. Unique, Endangered, Fragile or Limited Environmental Resources (biologic, topographic, wetlands (within one mile), floodplains (within one mile), scenic rivers, natural resource areas, etc.)	Issuance of the General Permit would have beneficial effects on the resources identified in this category. Implementation of the SWMP and BMPs will reduce the potential for pollutants to reach state waters. Implementation of BMPs may create new habitats (such as ponds or wetlands) and may provide new or improved vegetation (such as reseeding with erosion resistant grasses or removing noxious weeds). The actual construction of BMPs could have temporary minor adverse effects in a relatively localized area around the BMPs.
B, C	8. Land Use (waste disposal, agricultural lands [grazing, cropland, forest lands, prime farmland], recreational lands[waterways, parks, playgrounds, open space, federal lands], access, commercial and industrial facilities [production & activity, growth or decline], growth, land use change, development activity)	Implementation of the SWPPP and BMPs would have a beneficial effect on this category. Implementation of the SWMP and BMPs would help prevent the migration of pollutants from the small MS4 onto adjacent areas. The actual construction of BMPs could have temporary minor adverse effects in a relatively localized area around the BMPs.
B, C	9. Historical, Cultural & Archeological (sites, facilities, uniqueness, diversity)	Issuance of the General Permit, and consequent implementation of a SWMP and BMPs, could have minor beneficial effects in that improvements in storm water management may result in more controlled storm water runoff. This could result in less erosion and potential destruction of historical, cultural, and archeological sites. However, there could also be minor adverse effects in that during construction of the BMPs, subsurface artifacts may be disturbed if the operator is unaware of the potential presence of artifacts at the site. Under prior General Permits, there has been no evidence that storm water BMP construction has significantly affected the resources in this category, although the actual facilities or activities discharging into the small MS4 may have had such impacts.
B, C	10. Aesthetics (visual quality, nuisances, orders, noise)	Issuance of the General Permit would have a beneficial effect on surface water aesthetics in the vicinity of the regulated small MS4. Implementation of the SWMP and BMPs would help prevent erosion, require revegetation of disturbed areas, and may result in more aesthetic landscaping. Striving to minimize potential pollutants in storm water runoff and receiving surface water would also be an improvement in aesthetics, such as less litter and/or sediment in receiving surface waters. Temporary minor adverse effects could occur during and shortly after the construction of BMPs, before vegetation has had a chance to stabilize disturbed soils.
B, C	11. Demands on or Changes in Environmental Resources Including Land, Water, Air, or Energy Use (need for new or upgraded energy sources, potential for recycling, etc.)	There would be a beneficial effect on resources in this category. The development, implementation, and enforcement of a SWMP, including BMPs, will help remove pollutants from the environment in general. This could include waste reduction, reuse, recycling, and/or treatment initiatives. Potential minor adverse effects could occur by an increase in land or energy use for BMP implementation.

	Key to Ranking
NA	Not applicable
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	Impacts on the Human Population			
Rank	Consideration	Remarks		
N	12. Changes in Demographics Characteristics (population quantity, distribution and density, rate of change)	Issuance of this General Permit will have no impacts on this category.		
N	13. General Housing Conditions (quality, quantity and affordability)	Issuance of this General Permit will have no impacts on this category.		
N	14. Potential for Displacement or Relocation of Business or Residents	There will be little to no effect on this category. However, improvements in storm water management brought about by the SWMP and BMPs could result in increased stability and usability of certain lands and water resources in a given area as a minor beneficial effect, but the construction and location of BMPs does have a small potential to have a minor adverse effect on this category if improvements to storm water management systems are necessary.		
В	15. Public Health and Safety (medical services and facilities, police, fire protection and hazards emergency medical services, [see #7 Land Use for waste disposal])	Issuance of the General Permit, and consequent development and implementation of the SWMP and BMPs would have a potential beneficial effect to these resources based on an expected decrease in the potential for pollutants to enter the environment and improvements to storm water management in general. A potential minor adverse effect would be a very small increased demand for municipal services in the implementation of the SWMP and BMPs (such as during construction of BMPs).		
В	16. Local Employment and Income Patterns (quantity and distribution of employment, economic impact)	Issuance of the General Permit would have a beneficial effect on this category. The development and implementation of the SWPPP and BMPs would require the services of professionals, consultants and various local services, resulting in a potential minor increase in the local employment and economy.		
В	17. Local and State Tax Base and Revenue	Potential beneficial effect due to the response stated above in (16).		
N	18. Effects on Social Structures and Mores (Social conventions/ standards of social conduct), Demands on Social Services (law enforcement, educational facilities [libraries, schools, colleges, universities], welfare, etc.)	There will be little to no net effect on this category, at least with respect to social conventions/standards. There will be some public education and involvement associated with developing and implementing a SWMP and BMPs. It is also possible that municipal enforcement staff may be necessary to handle the enforcement aspect of the SWMP and any local ordinances or similar which are put into place. It is possible to have offsetting minor beneficial and adverse effects, but is largely dependent on what the permittee includes in their SWMP.		

B, C	19. Transportation Network (conditions and use of roads, traffic flow conflicts, rail, airport compatibility, etc)	Issuance of the General Permit would have both minor beneficial and minor adverse effects with respect to this category. As publicly-owned/operated roads and highways have storm water conveyances which are included under this General Permit, the development, implementation, and enforcement of a SWMP and BMPs should help improve the condition of the Transportation Network. The actual construction and maintenance of BMPs may have a temporary minor adverse effect on the Transportation Network through brief disruptions of traffic flow.
N	20. Consistency with Local Ordinances, Resolutions, or Plans (conformance with local comprehensive plans, zoning or capital improvement plans)	Based on previous Department experience, issuance of the General Permit will have little or no substantive effect on the subjects described in this category. In the development, implementation, and enforcement of the SWMP, and related BMPs, it is possible local municipal ordinances, resolutions, or plans may have to be created or modified. These mechanisms would be put into place using the local process. If these occur, it is probable the net effect on the municipality will be positive through improvements to the local environment.
B, C	21. Regulatory Restrictions on Private Property Rights (Are we regulating pursuant to a police power? Does the Agency action restrict the use of the property beyond the minimum necessary to achieve compliance with the Act? What are the costs of such additional restrictions resulting from proposed permit conditions? Are there other, less restrictive ways of achieving the same goal? See your assigned legal counsel for assistance preparing this section. [See the Private Property Assessment Act checklist accompanying this permit for details.]	See attached Private Property Assessment Act checklist.

Other groups or governmental agencies contacted or which may have overlapping jurisdiction:

The federal Environmental Protection Agency also regulates the discharges of storm water from similar small MS4s on Indian reservation lands. Various other federal, state and local permits, ordinances, orders, judgments, or decrees may also pertain to small MS4s regulated under this General Permit, but typically not with respect to the actual storm water discharge.

Individuals or groups contributing to this Programmatic Review:

State of Montana, DEQ Permitting and Compliance Division, Water Protection Bureau, Storm Water Program.

Summary of Issues:

This General Permit is being issued to comply with federal and state rules. Issuance of this MPDES General Permit will result in a net improvement to storm water quality in Montana's more urban areas. This will be brought about by the development, implementation, and enforcement of a Storm Water Management Program and consequent BMPs addressing the six minimum control measures. The Department will

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require this Program to be fully implemented by the expiration date of this General Permit for regulated small MS4s which initially submitted an application in March 2003.

Summary of Potential Effects:

The effects of the proposed issuance of the General Permit would be to eliminate or minimize impacts to water quality caused by storm water runoff. Through the development, implementation, and enforcement of a SWMP and implementation of associated BMPs, the General Permit will have a beneficial effect on the area's storm water quality and all related resources as demonstrated in the preceding table.

Any potential adverse effects associated with the proposed issuance of the General Permit will be minor, and will not be significant. These effects are typically caused by the construction of the BMPs (small and localized in extent) and are often short term in length (construction period).

This General Permit, and obtaining authorization under it, is an urban storm water regulatory tool which is unprecedented in Montana. It includes provisions to significantly expand pollution prevention efforts with respect to storm water runoff, which in turn translates to improvements throughout the urban area environment.

Cumulative Effects:

The issuance of this General Permit should have a net beneficial (positive) cumulative effect on storm water quality. Activities covered under this General Permit are located around more urban areas, and all of the small MS4s covered under this General Permit are for existing discharges. Storm water quality, and consequently receiving water quality, will be improved with the issuance of this General Permit, as opposed to the current status and not issuing this General Permit.

Recommendation:

Issue this General Permit.

Recommendation for further Environmental Analysis:		
Prepare an Environmental Impact Statement Prepare a detailed Environmental Assessment X No further analysis for issuance of the General Pern	nit	
Programmatic Review prepared by: Brian Heckenberger	Date:	November 2004
Approved by:		

Thomas D. Reid, Supervisor